

## User Manual

This solar charge controller designed for solar lawn lights, solar garden lights, Mini solar street light, mini solar advertising light box and so on. The box of the controller is compact sealed with silicon. They have the function of Temperature Compensation during charging and Sensor Control (optional), fit for 24W 12V or 36W 12V solar panels.

### Function:

1. Overcharging and Overdischarging protection
2. Prevent the reverse current from the battey to the solar panel at night time.
3. Automatically open the loads after sunset according to the light intensity. (Optional)
4. Automatically close the loads:
  - A: battery voltage is in full condition, automatically close the loads after sunrise.
  - B: the voltage of battery is low, automaltically close the loads in advance.



### Connection: (Ref. the drawing)

1. Connect the "+" "-" poles of the battery with relevant cables. Red color is "+"
2. Connect the "+" "-" poles of the solar panel with relevant cables on the left of the picture. Red color is "+"
3. Connect the "+" "-" poles of the loads with relevant cables on the right of the picture. Red color is "+".

### Indicator:

1. One charging indicator, light indicates strong charging, flash indicates float charging, not light indicates stop charging.
2. One Load indicator, light indicates there is power output, the loads could normal working, not light indicates no output, the loads can not work. (See picture 1)

### Attention:

1. Please check the rated voltage of the solar panel and loads, they must be same with controller, all their voltage should be 12V.
2. The input current of the solar panel and output current of the loads can not more than the rated current of the controller. (2A or 3A)
3. The controller can not short circuit.
4. Forbid use other DC power supply instead of solar panels for the battery charging through the controller.

## Specification

Rated Voltage	12V
Rated Charge Current	2A or 3A
Rated Discharge Current	2A or 3 A
HVD (High Voltage Disconnection)	14.4V
Temperature Compensation	-3mV/°C/cell
Size	55×36×20mm
LVD (Low Voltage Disconnection)	10.5V
LVR (Low Voltage Reconnection)	12.0V
Light Controller Mode	visibility 20m
Temperature	−10- +40 °C
Relative Humidity	≤90%
Net weight	33g